

Student Management System

```
import os

FILE_NAME = "students.txt"

def add_student():
    roll = input("Enter Roll Number: ")
    name = input("Enter Student Name: ")
    marks = input("Enter Marks: ")

    with open(FILE_NAME, "a") as file:
        file.write(f"{roll},{name},{marks}\n")

    print("Student Added Successfully!")

def view_students():
    if not os.path.exists(FILE_NAME):
        print("No records found!")
        return

    with open(FILE_NAME, "r") as file:
        data = file.readlines()

    if not data:
        print("No students available!")
        return

    print("\nRoll | Name | Marks")
```

```
print("-----")

for line in data:
    roll, name, marks = line.strip().split(",")
    print(f"{roll} | {name} | {marks}")

def search_student():
    roll = input("Enter Roll Number to Search: ")

    with open(FILE_NAME, "r") as file:
        found = False
        for line in file:
            data = line.strip().split(",")
            if data[0] == roll:
                print("\nStudent Found:")
                print("Roll:", data[0])
                print("Name:", data[1])
                print("Marks:", data[2])
                found = True
                break
        if not found:
            print("Student Not Found!")

def update_student():
    roll = input("Enter Roll Number to Update: ")
    lines = []
    updated = False

    with open(FILE_NAME, "r") as file:
        lines = file.readlines()
```

```
with open(FILE_NAME, "w") as file:  
    for line in lines:  
        data = line.strip().split(",")  
        if data[0] == roll:  
            name = input("Enter New Name: ")  
            marks = input("Enter New Marks: ")  
            file.write(f"{roll},{name},{marks}\n")  
            updated = True  
        else:  
            file.write(line)  
  
    if updated:  
        print("Student Updated Successfully!")  
    else:  
        print("Student Not Found!")  
  
def delete_student():  
    roll = input("Enter Roll Number to Delete: ")  
    lines = []  
    deleted = False  
  
    with open(FILE_NAME, "r") as file:  
        lines = file.readlines()  
  
    with open(FILE_NAME, "w") as file:  
        for line in lines:  
            data = line.strip().split(",")  
            if data[0] != roll:  
                file.write(line)  
            else:
```

```
deleted = True

if deleted:
    print("Student Deleted Successfully!")
else:
    print("Student Not Found!")

def main():
    while True:
        print("\n--- Student Management System ---")
        print("1. Add Student")
        print("2. View Students")
        print("3. Search Student")
        print("4. Update Student")
        print("5. Delete Student")
        print("6. Exit")

    choice = input("Enter your choice: ")

    if choice == "1":
        add_student()
    elif choice == "2":
        view_students()
    elif choice == "3":
        search_student()
    elif choice == "4":
        update_student()
    elif choice == "5":
        delete_student()
    elif choice == "6":
        print("Exiting Program...")
```

```
break  
else:  
    print("Invalid Choice!")  
  
if __name__ == "__main__":  
    main()
```